

Remarks

Claims 2-12 were pending.

Claim 12 is cancelled.

Claims 2-4, 6 and 10 are amended.

Claims 9 and 11 are withdrawn.

The application now contains claims 2-11.

Claim 2 is amended to delete the first, third, fourth and sixth structures from the definition of A¹ and A² and the third, fourth and fifth structures from the definition of A³ and A⁴.

Claim 3 is amended to delete the first, third, fourth and sixth structures from the definition of A¹ and A² and to delete as now unnecessary the final phrase "wherein R⁵ is C₁-C₈-alkyl".

Claim 4 is amended to delete the third structure from the definition of A³ and A⁴.

Claim 6 is amended to delete the term "A-1 to A-29" from line 2 and to delete the structures A-1 and A-3.

Claim 10 is amended to change the dependency to claim 2.

Support is inherent in the claims. No new matter is added.

Rejections

Claims 2-8, 10 and 12 are rejected under either 35 USC 102(b) or 35 USC 103(a) over EP 1087006.

Applicants respectfully traverse the rejections.

The present Action succinctly details the use of many DPP's in electroluminescent devices as found in EP 1087006 and also makes note of the use of host/guest complexes. Applicants respectfully note that, as suggested on page 6 of the Action, EP 1087006 does not provide the host/guest complexes of the instant invention. Applicants also note that the durability of the luminescent species in a device is not discussed in EP 1087006, nor is guidance given as to which materials would be advantageous in this regard.

In order to focus on specific features of the invention, Applicants have chosen to amend the claims to relate only to the host/guest complexes wherein A1 and A2 of the host compound are derived from 1-naphthyl groups or 1-naphthyl groups bearing one or two additional fused rings, and A3 and A4 of the guest compound are derived from phenyl or 1-naphthyl groups either of which are substituted at the 4 position by an amine. Applicants reserve the option of pursuing the deleted material in subsequent filings, but believe it will aid prosecution to more narrowly focus on this subset of the initially claimed invention.

As found on page 7, lines 11-16 of the instant Specification, the present invention provides red or orange fluorescent compositions with a high heat stability, good solubility in polymers, high light stability, and the ability to be used in plastics without decomposition and loss of lightfastness with a high electroluminescent (EL) emission intensity.

Applicants respectfully maintain that the invention, especially as instantly amended, provides host/guest complexes that have not been previously prepared that, unpredictably, have a combination of properties that make them ideal for certain end uses such as electroluminescent devices. For example, these complexes, in addition to being compatible in a wide variety of polymeric systems under a wide range of processing conditions emit strongly at desired wavelengths with exceptional end use lifetimes. That is, not only do the instant complexes exhibit desirable emission characteristics, they are very stable in use and maintain these desirable characteristics over a long period of time.

In particular, Applicants note that the stability of a host/guest complex under use in a device, and what factors may impact this characteristic are not raised as an issue in EP 1087006, nor is there any guidance in the art that the complexes identified in the instant application would prove to have so desirable a combination of attributes.

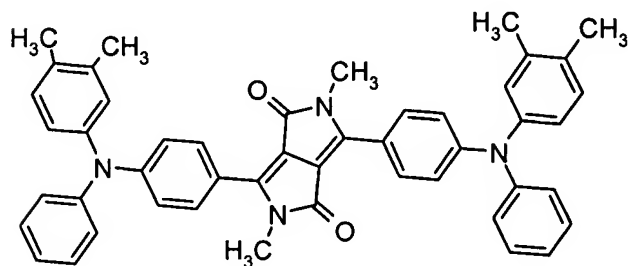
For Example, as evident from Table 1 and 2 of the instant application, the composition of the invention, comprising a DPP of the formula I and a DPP of the formula II, provides a luminescent element which is high in the efficiency of electrical energy utilisation and is characterized by a much higher luminance than the individual DPP compounds of formula I and II.

In addition, compounds of formula I, wherein A¹ and A² are 1-naphthyl, or 9-phenanthryl (which can be seen as a 1-naphthyl with a substituent that is an annulated ring) show better EL durability. Reference is made to co pending US Application 11/792,028, Table 2, page 86 where the sustainability of a few of the host/guest complexes of the instant invention is reported:

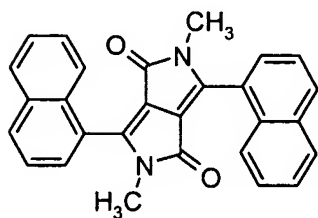
Table 2 (US 11/792,028)

Example	Light emitting layer (H / G)	EL initial performance Emission max (Cd/m ²)	EL durability Initial brightness (Cd/m ²)	Sustainability % of initial brightness**
Ex.8	A-10/ Cpd. 2	16,740	843	68 %
Reference 2	Cpd. 1/Cpd. 2	14,010	730	60 %

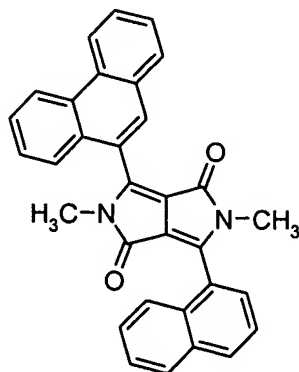
** After 280 hours in continuous driving mode



Compound 2 (Cpd. 2)



Compound 1 (Cpd. 1),



(A-10).

Applicants respectfully submit that the instantly claimed host/guest complexes have never before been prepared and are novel. Applicants therefore kindly ask that the rejections under 35 USC 102(b) be withdrawn.

Applicants also respectfully submit that the instantly claimed host/guest complexes exhibit a combination of properties including excellent stability as well as excellent luminescent characteristics which could not be gleaned given the broad disclosures of the existing art. Applicants therefore kindly ask that the rejections under 35 USC 103(a) be withdrawn.

Claim 12 is rejected under obviousness type double patenting over US 6,603,020. Claim 12 is cancelled.

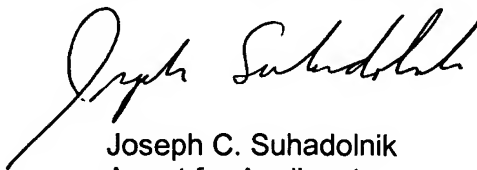
Claim 10 is objected to for being dependent on a rejected claim. The dependency of claim 10 has been corrected.

Applicants submit that all rejections and objections have been addressed and are overcome and kindly ask that they be withdrawn and that claims 2-11 be found allowable.

In the event that minor amendments will further prosecution, Applicants request that the examiner contact the undersigned representative.

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Respectfully submitted,



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